STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

Commonwealth Edison Company	)	
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	)	Docket No. 13-0495
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	)	
Approval of the Energy Efficiency and	)	
Demand-Response Plan Pursuant to	)	
Section 8-103(f) of the Public Utilities Act	)	

Rebuttal Testimony of

Philip H. Mosenthal

On Behalf of

The People of the State of Illinois

November 12, 2013

Q. Please state your name and business address.

A. Philip H. Mosenthal, Optimal Energy, Inc., 10600 Route 116, Hinesburg, VT 05461.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of the People of the State of Illinois ("the People" or "AG").

Q. By whom are you employed and in what capacity?

A. I am the founding partner in Optimal Energy, Inc., a consultancy specializing in energy efficiency and utility planning. Optimal Energy advises numerous parties including utilities, non-utility program administrators, government and environmental groups.

Q. Have you submitted testimony before the ICC before?

A. Yes. I submitted Direct Testimony in this docket. I have also testified in numerous past dockets related to the Commission's review of utility-run energy efficiency programs mandated by Section 8-103 and 8-104 of the Public Utilities Act ("PUA" or "the Act").

Q. Are you providing a summary of your qualifications and experience?

A. My qualifications and experience were provided in Direct Testimony in this docket.

Q. What is the purpose of your rebuttal testimony in this proceeding?

A. My testimony addresses selected issues discussed in the Direct Testimony of Request Equitable Allocation of Costs Together (REACT), Illinois Industrial Energy

Consumers (IIEC), Chicago Infrastructure Trust, Environmental Law and Policy Center (ELPC) and Natural Resources Defense Council (NRDC).

Q. Please summarize your testimony.

A. My testimony focuses on the following areas that are addressed in intervenor Direct Testimony:

1. REACT's and the IIEC's concerns with ComEd's proposed Large C&I Pilot program;
2. The Chicago Infrastructure Trust's proposal for a Negawatt Feed-in-Tariff program;
3. ELPC's proposal for a Voltage Optimization program; and
4. ELPC's and NRDC's positions on ComEd's proposal to deem realization rates.

<u>Response to REACT and IIEC</u>

Q. What are your comments related to REACT's and IIEC's Direct Testimony?

A. REACT witnesses Rick Flowers and Bradley Fult, as well as IIEC witness Robert Stephens, provide testimony on ComEd's proposed Large C&I Pilot Program. ComEd has proposed this "self-direct" program for its largest C&I electricity users in response to concerns from large customers that ComEd's current C&I Incentives program does not serve their needs effectively. However, REACT and IIEC are critical of several aspects of ComEd's proposed program.

REACT witness Fult states:

> "the large C&I pilot program that ComEd is currently proposing is almost certainly doomed to fail, at least for the largest customers – it is nothing more than a variation on the failed theme of ComEd command and control, which breeds

> unnecessary bureaucracy and complexity, resulting in nothing except customer frustration and inaction."[1]

It seems clear from REACT's and IIEC's testimony that it believes ComEd's approach results in too much micromanaging of its large customers' decisions and actions. Specifically, they object to the fact that ComEd's program would:

1. require a customer contribution of 33% of any efficiency projects (e.g., Stephens pp. 4, 7);
2. require that ComEd screen projects to ensure that they pass the total resource cost (TRC) test (e.g., Stephens p. 4);
3. require customers to initially contribute to the efficiency funds and only recoup these funds later if they expend them on efficiency projects after approval of ComEd (e.g., Stephens pp. 4, 6, Fults p. 31); and
4. require strict timing for application submittal and completion of projects (e.g., Stephens p. 4).

Q. Do you believe that requiring customer contributions to efficiency projects as a pre-condition for accessing the additional Rider EDA funds large customers contribute to is appropriate?

A. Yes. REACT and IIEC seem to view their contributions to the efficiency portfolio as simply their money that should be returned to them in full to cover 100% of efficiency projects. I believe this is a misguided view of ratepayer funded efficiency efforts. For example, REACT complains that much of ComEd's funding goes to ancillary services such as marketing, technical assistance, trade ally outreach and training, and evaluations.[2] They imply that virtually all funds should simply be rebated back to customers. I disagree with

[1] REACT witness Fults Direct Testimony, p. 33.

[2] REACT witness Fult Direct Testimony, pp. 13-16.

this view. Efficiency programs are intended to intervene in the energy markets by working with all appropriate market actors to ultimately overcome barriers to adoption of efficiency and to change behaviors long term. These ancillary services are critical to overall success of the programs. In addition, the programs are intended to leverage additional efficiency investments by customers. All of these program tactics can result in cost-effective savings and benefit all ratepayers by avoiding more costly future supply-side investments and reducing market clearing prices of energy.

The only customers that currently benefit from 100% funding of efficiency projects are low-income customers. This is logical for policy and equity reasons, as these customers are very unlikely to invest in any efficiency if it requires a direct financial contribution. REACT and IIEC are proposing that the largest C&I customers be offered the same deal as these low income customers. Clearly, these large customers have significantly more resources to devote to efficiency improvements than low income customers. I see no policy reason the largest customers should be allowed to receive 100% funding for their projects, when all other smaller customers (with the exception of low-income ratepayers) must contribute with co-payments. Further, ComEd's proposal that the largest customers only contribute 33% of project funding means they will still receive, on average, a better deal than most other customers participating in the other programs. In fact, the requirement that large customers contribute some additional co-payment helps to discourage freeriders and non-cost-effective measures by ensuring customers have some “skin in the game.” These facts make the ComEd co-payment requirement equitable and appropriate.

Q. What are your concerns regarding REACT’s perception that ComEd is applying too much “command and control” over its customers?

A. I sympathize to a certain extent with REACT. However, it is not clear exactly what its objections are. REACT seems to object to ComEd's proposal that it must (1) screen projects to ensure they are cost-effective and (2) provide approval of them. This is not a legitimate complaint, however. As the custodian of ratepayer funds under Section 8-103 of the Act, ComEd is obligated to oversee the delivery of cost-effective efficiency programs. While ComEd should remove any unnecessary barriers or administrative burdens, the Commission has a compelling interest in ensuring that the Rider EDA funds are used for appropriate and cost-effective efficiency improvements. As a result, I believe ComEd's approach is reasonable.

Q. REACT suggests that the electric Large C&I Pilot program should copy the current gas self-direct program. Do you agree?

A. No. REACT states "recent information suggest that the self-direct approach for the largest natural gas customers already is achieving significant energy efficiency savings in Illinois – it makes perfect sense to implement a pilot program on the electric side, to see if the same effective outcome can be achieved." However, REACT does not substantiate this claim. Further, I believe there is no evidence that the gas self-direct program is working well. This program suffers from a number of problems that should not be repeated on the electric side.

First, the gas self-direct program has no mandate that program funds go toward cost-effective efficiency upgrades. Quite simply, customers can use the funds for any "efficiency" investment they choose. Second, there are no clear monitoring or verification guidelines. As a result, it is not clear at all what the true savings, if any, are occurring with this program. Programs without cost-effectiveness, evaluation, measurement and verification requirements are at increased risk for high free ridership and minimal true incremental efficiency savings.

Q. Do you believe that ComEd should require large customer efficiency projects to be cost-effective based on the TRC test?

A. Yes. This is consistent with Section 8-103 of the PUA, which calls for investment in cost-effective efficiency measures. This requirement ensures that projects are societally beneficial, and simply treats the large customers the same as all other customers participating in other programs. I do not believe this approach is burdensome. In my experience, large customers generally have relatively high return-on-investment criteria that would make it very unlikely these customers would want to pursue efficiency projects that are not highly cost-effective from a TRC standpoint.

That said, IIEC witness Stephens expresses a concern that this approach will not be transparent enough for customers to understand whether their projects will pass the TRC test.[3] I encourage ComEd to make a screening tool available to these customers, or otherwise ensure that the TRC calculation methodology and assumptions are transparent and understandable. As a general rule, avoided costs tend to be lower than retail costs, so virtually any efficiency project providing a competitive return-on-investment to the customer is likely to pass the TRC test.

[3] IIEC witness Stephens Direct Testimony, p. 7.

Q. What are your comments regarding ComEd's proposed requirement that large customers continue to pay the Rider EDA charges, and wait until they complete a project to recoup those funds?

A. I believe ComEd's approach is reasonable. While I can understand the large customer's desire to keep control of their funds until they use them, I believe this could create significant problems and disputes in the future. If a customer does not fully use their funds, for example, then ComEd would be in a position of having to claw back these funds directly from each customer. This could be difficult and contentious, and could lead to arguments about the appropriate balance and interest payments. In addition, waiting until the end of the funding cycle to collect these funds could create cash flow problems for ComEd and prevent it from otherwise expending these funds on other programs.[4] I therefore believe it is appropriate for ComEd to collect these funds up front, as it always has. However, I do believe that it may be appropriate for ComEd to establish and control escrow accounts for each customer to properly track the funds available and ensure transparency to customers, so they can easily know how much is in each fund and when it will be lost if not used.

Q. Do you have any comments around timing of applications?

A. Yes. REACT and IIEC have indicated concerns with ComEd's requirement that all potential projects during the entire 3-year plan period be defined and applied for within the first six months of the Plan.[5] I agree that this requirement is unreasonable, and would likely

[4] Because the program is designed to return any unused funds to the general pool of efficiency portfolio funding, ComEd should fully expend these funds in other programs once it is clear they will not be used within the Large C&I Pilot program.
[5] IIEC witness Stephens Direct Testimony, pp. 8-9.

create an unnecessary burden. Rather, I propose that large customers simply be required to declare their intent to rely on the self-direct program within the first six months of the three-year Plan period. This is important because if a large customer chooses this self-direct path they should not be eligible for standard rebates in the other programs. However, once a customer has declared they would like to pursue the "self-direct path," I suggest ComEd allow projects to move forward whenever customers are ready. I propose customers be able to access a rolling average of funds contributed, up to three-years of contributions at any given time. For example, they could do a project in the third year and still use 100% of the funds they have contributed over the past three years. If they waited to do any project until the fourth year, then they would have lost their contributions from year 1. In this way, customers can plan long term projects that span Plan periods, but will still be exposed to the "use it or lose it" concept that is a key feature of the program, and which REACT seems to support.[6]

ComEd should be directed to establish flexible rules that permit progress payments on large multi-year projects, and allow the rolling three-year fund pool to continue across Plan periods. This would permit ComEd to know how much funding has been lost at the end of each program year so that it can reallocate those funds to other programs, and spend them within a plan period. It also resolves the large customers concerns around long term projects that span across Plan periods.

Q. Are there any examples of this type of approach?

[6] REACT witness Fult Direct Testimony, p. 30.

A. Yes. In Massachusetts, electric utilities offered a similar self-direct program in the late 1990s and through most of this century.[7] While program rules have varied somewhat by utility, they essentially allow large customers to access their own contributions less an administrative percentage that goes toward overall portfolio infrastructure and EM&V activities. Under this program, customers can access two years of efficiency contributions at any given time -- either the last year plus the current year, or the current year and following projected years contributions. Once funds remain unused longer than two years, they are lost permanently.

<u>Response to Chicago Infrastructure Trust</u>

Q. What is the Chicago Infrastructure Trust recommendation regarding a Negawatt Feed-In-Tariff program?

A. Chicago Infrastructure Trust witness Claire Tramm has proposed a negawatt, feed-in-tariff program whereby ComEd would simply establish a standard offer rebate level equal to the available Section 8-103 portfolio budget cap, divided by the Act's annual goals. Under this approach, she argues that ComEd could by definition have the necessary funds to meet the statutory goals because the Company would allocate the funds based on the amount of money per kWh saved that it has available. I estimate that for ComEd (not including the DCEO portion of goals and budgets), this would result in incentives of slightly less than 8 cents/annual kWh saved.[8]

Q. Is witness Tramm's Direct Testimony clear on exactly what she is proposing?

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[7] Recent legislation has created additional approaches as well.

A. No. On the one hand it appears she is suggesting calculating the feed-in tariff based on the *entire* available spending cap divided by the *entire* statutory goals. She states:

> EERPs [Energy Efficiency Resource Providers] would be compensated at the level of the EEPS current cost cap per unit of energy savings, minus a small program administration fee that would be collected by the utilities on a per-negawatt basis.[9]

However, she then states:

> …the program would be used to acquire *only the incremental amount of negawatts* between: a) the number of negawatts the utilities other programs are projected to deliver cost-effectively in a given year (or other appropriate period) and b) the number of negawatts they are regulated to deliver [the statutory goals] in that year (or other appropriate period). [Emphasis added][10]

I cannot reconcile these two statements. Under the first strategy, it would appear that all ComEd-proposed programs would be eliminated and, instead, it would offer the feed-in-tariff of approximately 8 cents/annual kWh saved only. Under the latter proposed scenario, ComEd's proposed programs already consume the entire available budget. Consequently, it is not clear what source of funds Ms. Tramm envisions would be used for the "incremental" feed-in-tariff program she seems to be proposing be added to the ComEd proposed portfolio. In short, this latter recommendation seems impossible on its face and would by definition violate the Act's spending caps.

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[8] Presumably some funds would need to be removed to support evaluation, administration, data tracking, and other core services, so this is a rough estimate and perhaps slightly on the high side.

[9] Chicago Infrastructure Trust, Tramm Direct Testimony, p. 5.

[10] Chicago Infrastructure Trust, Tramm Direct Testimony, p. 5.

Q. Assuming Ms. Tramm's intent is for the former proposal – that all programs are eliminated and a feed-in tariff is offered instead -- would you support that proposal?

A. No. I believe this to be a very bad idea, and would likely result in substantially lower net benefits to ratepayers, high free ridership, cream skimming (where customers only invest in the cheapest efficiency options), and a complete inability to ensure other important policy objectives, such as equity among rate classes, would be achieved.

Under Ms. Tramm's concept, this standard-offer program would require the market to respond to the incentive offering, with little ability for ComEd to target markets, customers, or technologies. However, because of the budget caps, the feed-in tariff would have to be set at a very low price. As a result, it is likely the resources submitted into the program would reflect very high levels of free ridership, because the incentives would not be robust enough to dramatically change many customer's plans. In addition, to the extent they did promote new incremental savings that are not from freeriders, it is likely the negawatt tariff would encourage installation of only the cheapest and fastest payback measures, resulting in a high level of "cream skimming."

Further, this market-based approach would prevent ComEd from intervening in markets in ways that can result in long term changes in behavior. For example, a negawatt tariff program would not have enough funds to provide technical assistance to customers, outreach and training to trade allies, or other efforts that are necessary for the long term success of efficiency programs.

Q. What other problems do you see with Ms. Tramm's proposal?

A. Section 8-103 of the PUA requires electric utilities to provide a variety of programs to all customers who pay for the program, including residential, commercial and industrial customers. Ms. Tramm's proposal is vague and does not identify which customer segments she intends the negawatt tariff to serve. If the proposal is directed to all customer segments, it is likely that participation would primarily come from a small number of relatively large and sophisticated customers. Residential and small commercial customers would find it very difficult to participate at all. This is because the burden of identifying and analyzing efficiency opportunities would fall to them without any technical assistance or other services that are necessary to assist these smaller customers. Energy service companies (ESCOs) would be well positioned to participate, however, they generally only work with the largest customers because of the significant risks and transaction costs involved in those projects.

Ms. Tramm's proposal would also remove any ability for ComEd to control and plan for the investments being made. This would prevent ComEd from ensuring that policy objectives, such as reasonable equity among different customer segments, are achieved. In fact, at a minimum, to comply with Section 8-103 of the PUA, it would be necessary to set aside specific funds to target low income and public sector customers separate from the feed-in-tariff because the PUA requires a fixed portion of available funding be allocated to programs serving these customers.

Q. Are there any other ways that Ms. Tramm's proposal could violate the PUA?

A. Yes. Ms. Tramm suggests providing the feed-in-tariff as a standard offer to all takers regardless of the cost-effectiveness of projects, and that "actual measure costs should be ignored."[11] This means that ComEd would have no way of judging whether the

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[11] Chicago Infrastructure Trust, Tramm Direct Testimony, p. 7.

feed-in-tariff program would be cost-effective, contrary to Section 8-103 of the PUA, or have any ability to plan for and ensure that the investment dollars are spent cost-effectively. Although I am not an attorney, I believe this would violate the requirement in Section 8-103(a) that the overall efficiency portfolio pass the TRC test.

Q. Do you have any other comments on Ms. Tramm's proposal?

A. Yes. Even if the concerns above could somehow be overcome, I believe eliminating the current Section 8-103 programs in favor of a feed-in-tariff would be a serious mistake. ComEd has established numerous relationships with market actors over the past six years of program delivery. These relationships, and the momentum of continuing relatively stable, cost-effective programs are important to the long term success of the overall energy efficiency effort. If ComEd were to simply eliminate all of its other programs with little notice, the energy efficiency market would be substantially disrupted and the investments ComEd and trade allies have already made would be undermined. For example, by providing consistent efficiency offerings, the Company sends messages to equipment vendors as to what products and appliances will be promoted with rebates, thereby encouraging them to stock and promote the efficient products. To then eliminate these rebates with little notice would likely create a backlash that would result in less efficiency, and take years to overcome.

Response to ELPC

Q. What are your comments related to ELPC witness Volkmann's proposal for a on Voltage Optimization program?

A. ELPC witness Volkmann proposes that the Commission order ComEd to perform a Voltage Optimization program feasibility and potential study to determine impacts and costs.[12] I support this proposal and believe there is strong evidence that this type of program will be very cost-effective. Mr. Volkmann also states:

> ComEd has an operational tracking measure for its Smart Grid program related to the use of AMI meters for voltage and VAR control. This leads me to believe that there is budget earmarked for VO in ComEd's Smart Grid plan but I don’t know the amount at this time. I recommend that this budget from the Smart Grid plan be used for the VO feasibility/potential study and the VO implementation.[13]

I support this approach of using AMI deployment plan funds to study and deploy VO. What is important is that VO not be pursued using the very limited energy efficiency funds established under Section 8-103 of the PUA. VO fundamentally relates to ensuring the supply-side of the distribution system is managed efficiently and effectively, and at the lowest reasonable and reliable ratepayer cost. The Commission should therefore order ComEd to perform the study and then install and deploy VO on all feeders where it is estimated to be cost-effective. However, the costs of this distribution system management should be recovered similar to other distribution maintenance costs, and be clearly separate from the Section 8-103 funds.

Q. Is there any confusion around exactly what Mr. Volkmann is proposing?

A. Yes. Mr. Volkmann states “I also recommend that the Commission formally certify the energy efficiency and demand reductions associated with VO as qualified resources in meeting IL EE/DR standards…I recommend that the Commission order ComEd to use the

[12] ELPC witness Volkmann Direct Testimony, p. 33.

[13] ELPC witness Volkmann Direct Testimony, p. 37

results of the VO feasibility/potential study to reprioritize the programs under Plan 3 and submit the revised plan to the Commission by June 1, 2014."[14]

My understanding of the above quote is that Mr. Volkmann is proposing that VO savings be counted toward the efficiency goals under Section 8-103 of the PUA. While he has clearly indicated funding should come from the AMI implementation plan, this proposal seems somewhat contradictory in that he is suggesting VO be used to meet the Section 8-103 goals. If this were allowed, then it seems the funding would have to come from Section 8-103 funds as well. I do not support using Section 8-103 funds for the VO program.

Second, Mr. Volkmann's suggestion of reprioritizing the programs under Plan 3 seems to imply he is proposing VO be considered as a Section 8-103 program in ComEd's efficiency portfolio, and that at least some funds be derived and shifted from ComEd's other efficiency programs. Again, this seems to imply the Section 8-103 funds would support VO – an approach I do not support.

I also believe Mr. Volkmann's proposal that ComEd reprioritize its Plan 3 programs and resubmit a revised plan by June 1, 2014 is not reasonable or feasible. The first program year for Plan 3 begins on June 1, 2014. I do not believe it is realistic to expect ComEd to submit a revised plan on the day the Plan period starts. ComEd needs the time and certainty provided by timely Commission approval of its plan to put in place the many activities and decisions necessary to run an effective and efficient portfolio of programs.

Q. What is your recommendation regarding VO?

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[14] ELPC witness Volkmann Direct Testimony, p. 33-34.

A. I recommend the Commission order ComEd to undertake the feasibility/potential study described by Mr. Volkmann, with costs recovered through the normal delivery service charges separate from the Section 8-103 funds. Further, the Commission should make clear that ComEd should follow through with implementation of VO wherever it is estimated to be a least cost solution for ratepayers, and identify an appropriate cost recovery mechanism separate from the Section 8-103 programs and funding mechanism to facilitate this.

Q. What are your comments on ELPC and NRDC positions regarding deeming of realization rates?

A. ComEd has proposed that realization rates be deemed. NRDC witness Neme and ELPC witness Crandall indicate support for ComEd's proposal.[15] In my Direct Testimony, I opposed this proposal. This is because realization rates primarily measure variances between the gross savings ComEd would be tracking and the evaluated *ex poste* estimates of gross savings -- variances that would result from errors, poor assumptions, or other factors that are within ComEd's control. However, NRDC witness Neme notes in his Direct Testimony, based on a ComEd response to NRDC 2.16, that:

> However, ComEd has made clear that, consistent with the Commission's order in Docket No. 10-0570, those rules [deeming of realization rates] would only apply to components of realization rates over which ComEd has no control. It would not apply to components of realization rates that are within the control of the Company (e.g., data entry errors or custom engineering calculations).[16]

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[15] NRDC witness Neme Direct Testimony, p. 27-28; ELPC witness Crandall Direct Testimony, pp. 3, 28.

To the extent that ComEd is only asking for deeming of those aspects of realization rates that are clearly not within its control, I could support this request. However, I cannot think of an example where this could be the case. While ComEd did receive this protection in the Commission's Order in Docket No. 10-0570, I believe the reason for that policy no longer exists. This Order was issued prior to development of a statewide technical reference manual ("TRM"). Now that the TRM exists, all parties and the Commission are in agreement that the TRM will dictate appropriate gross savings claims for all measures included within it. In effect, these gross measure-level savings are now deemed, with any evaluation results that identify appropriate changes to the TRM only being adopted prospectively. Therefore, I believe there is no longer any need to deem realization rates.

Q. What do you recommend the Commission order regarding realization rates?

A. To the extent that it is possible there is some aspect of realization rates that ComEd could conceivably be exposed to retroactive risk from that is clearly not within its control, I believe the Commission can clarify in the Order in this docket that those realization rate findings should only be used prospectively. However, because it is not clear these even could exist, it is important that the Commission prohibit ComEd from adjusting goals downward as they have based on planned realization rates that are different (and generally lower) than 1.0. The Commission's Order should clarify that realization rates addressing items within ComEd control would still be applied retroactively. ComEd should clarify in its Rebuttal Testimony any categories of factors outside its control that realization rates might capture, to the extent ComEd believes they exist.

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[16] NRDC witness Neme, Direct Testimony, p. 27-28.

Q. Does this conclude your testimony?

A. Yes.